



**James Paget
University Hospitals**
NHS Foundation Trust

Imaging investigations when there are safeguarding concerns



**Children's and
Young Persons' Unit**
01493 452010

Patient Information

If you are pregnant or think you may be,
please inform the x-ray staff

In some situations, doctors may want to take x-rays or other images of a child to assess possible injuries. Imaging may include a full skeletal survey, CT (computed tomography) brain scan, MRI head and spine (magnetic resonance imaging) and US (ultrasound). The doctor in charge of your child's care will explain the reasons why these scans are required and is happy to answer any further questions you have regarding this leaflet.

Skeletal survey

The skeletal survey is a series of x-rays of your child's bones. It is used to identify any underlying problem with bone structure and identify any unknown fractures which may be healing or require further treatment.

The survey is carried out in two visits to the radiology department by experienced radiographers who are skilled in dealing with children. They will help you and your child through the procedure.

On the first visit 20-25 images are taken. Your child will need to be still and this may take up to an hour to complete the survey. A nurse will accompany you and assist the radiographer in holding your child. If your child has a favourite toy or comforter please bring this with you. The radiographers may be able to

time the survey to take place after a baby has had a recent feed or sometimes we will prescribe a mild sedative in an older child to help them relax. A preliminary report is usually available within 24 to 48 hours after the series of x-rays have been reviewed by two radiologists.

A second visit is required 11-14 days after the first set of images have been taken to complete the skeletal survey. Two chest/rib views are undertaken but sometimes further x-rays are needed.

CT brain scan

A CT scan is a Computerised Tomography scan. It looks at the bony skull and the brain inside. The scanner looks like a giant Polo® Mint. Your child will need to lie down on the scanning bed/table so that they can be positioned in the centre of the scanner. The actual scan takes only a few minutes so most children will lie still long enough for the scan to take place. Occasionally a medicine can be given to calm/relax the child- this is known as sedation.

The scan is reviewed by a consultant radiologist and a report is sent to the doctor looking after your child. The information will be shared with you as soon as it is available.

MRI scans

Sometimes it may be necessary to perform an MRI of the head and spine.

This scan uses a magnet to make a picture of part of the body. Unlike the CT the MRI does not use x-rays, so there is no risk of radiation exposure.

The MRI scanner looks like a giant Polo® Mint and the centre feels like a tunnel. A scan will take 20-30 minutes; some babies and young children may find it difficult to keep still. It may be appropriate to perform the MRI under sedation. The doctor will talk to you in more detail, before giving sedation. Your child will be carefully monitored during the scan.

The scan will be reviewed by a consultant radiologist and the results sent to the doctor in charge of your child's care. This information will be shared with you when it becomes available.

Ultrasound scans

Ultrasound is good for looking at the soft parts of the body that may not show up well on an x-ray or CT scan. First a gel is put on the skin, and then the picture is made by gently moving a smooth probe over the child's skin. It is similar to the baby scan expectant mothers have during their pregnancy.

The procedure is carried out by

a consultant radiologist. The report is sent to the consultant paediatrician and the information will be shared with you when it is available.

Risks of these tests

Skeletal surveys and CT brain scans use ionising radiation (X-rays). The radiation dose received during a skeletal survey is equivalent to approximately 10 days of natural background radiation, and carries a minimal risk (less than 1 in 100,000) of inducing cancer in later life. The radiation dose received during a CT brain scan is equivalent to approximately one year of natural background radiation, and carries a low risk (about 1 in 5,000) of inducing cancer in later life. These risks should be compared to the natural lifetime risk of cancer, which is about 1 in 3.

MRI and Ultrasound scans do not use ionising radiation, so there is no known cancer risk associated with these procedures. For these reasons careful consideration is given to performing a CT scan by the medical team looking after your child.

If you have any concerns or questions please speak with a member of nursing or medical staff.

Children's and Young Persons'
Unit 01493 452010

Feedback

We want your visit to be as comfortable as possible. Please talk to the person in charge if you have any concerns. If the ward/department staff are unable to resolve your concern, please ask for our Patient Advice and Liaison (PALS) information. Please be assured that raising a concern will not impact on your care. **Before you leave the hospital you will be asked to complete a Friends and Family Test feedback card.** Providing your feedback is vital in helping to transform NHS services and to support patient choice.

Trust Values

Courtesy and respect

- A welcoming and positive attitude
- Polite, friendly and interested in people
- Value and respect people as individuals
So people feel **welcome**

Attentively kind and helpful

- Look out for dignity, privacy & humanity
- Attentive, responsive & take time to help
- Visible presence of staff to provide care

So people feel **cared for**

Responsive communication

- Listen to people & answer their questions
- Keep people clearly informed
- Involve people
So people feel **in control**

Effective and professional

- Safe, knowledgeable and reassuring



The hospital can arrange for an interpreter or person to sign to assist you in communicating effectively with staff during your stay. Please let us know.

For a large print version of this leaflet, contact PALS 01493 453240

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